

## CONTROLLING POWER AND PERFORMANCE IN A MULTIPROCESSING SYSTEM

### 5 ABSTRACT OF THE DISCLOSURE

10 A method and controller for managing power and performance of a  
multiprocessor (MP) system is described. The controller receives sensor data  
corresponding to physical parameters within the MP system. The controller also  
receives quality of service and policy parameters corresponding to the MP system.  
15 The quality of service parameters define commitments to customers for utilization of  
the MP system. The policy parameters correspond to operation limits on inputs and  
outputs of the MP system. The operation input limits relate to the cost and  
availability of power or individual processor availability. The operation output limits  
relate to the amount of heat, acoustic noise levels, EMC levels, etc. that the individual  
or group of processors in the MP system are allowed to generate in a particular  
environment. A controller receives the physical parameters, the quality of service  
parameters and policy parameters and determines performance goals for the MP  
system and processors within the MP system. Then controller generates controls and  
20 applies them to individual processors to achieve the performance goals.

::ODMA\PCDOCS\AUSTIN\_1\157708\11097:7036/P160US